

**PENGARUH JUMLAH DAGING BUAH NAGA DAN GULA TERHADAP
SIFAT KIMIA, FISIK, TINGKAT KESUKAAN SELAI
BUAH NAGA MERAH (*Hylocereus polyrhizus*)**

INTISARI

Buah naga merah mengandung zat bioaktif yang bermanfaat bagi tubuh diantaranya antioksidan dan serat pangan dalam bentuk pektin. Buah naga segar tidak dapat disimpan dalam waktu lama karena memiliki kadar air hingga 90% dan umur simpan 7-10 hari, sehingga perlu pengolahan lebih lanjut untuk menjaga kebutuhan gizi dan memperpanjang umur simpan. Salah satu pengolahan buah naga adalah dibuat selai. Selai adalah buah yang dihancurkan dan ditambahkan gula, kemudian dipanaskan atau dimasak hingga terbentuk produk olahan yang kental. Tujuan dari penelitian ini untuk mengevaluasi pengaruh jumlah daging buah naga dan gula terhadap sifat kimia, fisik dan tingkat kesukaan selai buah naga merah.

Pada penelitian ini dibuat menggunakan rancangan acak lengkap (RAL) dua faktorial yaitu jumlah daging buah naga (100 g, 200 g, 300 g) dan gula (60 g, 70 g, 80 g). Analisis kimia selai meliputi kadar air, gula total, derajat keasaman (pH), dan aktivitas antioksidan. Analisis fisik selai meliputi daya oles dan warna. Sifat organoleptik diuji berdasarkan tingkat kesukaan. Data yang diperoleh dianalisis statistik dengan tingkat kepercayaan 95% dan dilanjutkan dengan *Duncan Multiple Range Test* (DMRT) jika terdapat perbedaan nyata.

Hasil penelitian menunjukkan bahwa jumlah daging buah naga dan gula berpengaruh nyata terhadap sifat kimia, fisik dan tingkat kesukaan selai buah naga merah. Selai yang disukai adalah selai dengan jumlah daging buah 300 g dan gula 80 g yang memiliki kadar air 23,14%bb, gula total 42,40%bk, derajat keasaman (pH) 5,60, aktivitas antioksidan 18,36%RSA, daya oles 9,78 cm, warna kecerahan 26,34, merah 3,67 dan kuning -0,41.

Kata kunci: Buah naga, selai, gula, sifat-gel.

THE EFFECT OF THE AMOUNT OF DRAGON FRUIT FLESH AND SUGAR ON THE CHEMICAL, PHYSICAL AND PREFERENCE LEVEL OF RED DRAGON FRUIT (*Hylocereus polyrhizus*) JAM

ABSTRACT

Red dragon fruit contains bioactive substances that are beneficial for the body, they are antioxidants and dietary fiber in the form of pectin. The fresh dragon fruit cannot be stored for a long duration of time because it has a moisture content up to 90% and a shelf life of 7-10 days, so further processing is needed to maintain nutritional needs and extend the shelf life of the red dragon fruit. One of the dragon fruit processing is to make it into jam. Jam is crushed fruit with the adding of sugar, then heated or cooked until a thick processed product is formed. The purpose of this study was to evaluate the effect of the amount of dragon fruit flesh and sugar on the chemical, physical and preference levels of red dragon fruit jam.

This study was made using a completely randomized design (CRD) two factorials, namely the amount of dragon fruit flesh (100 g, 200 g, 300 g) and sugar (60 g, 70 g, 80 g). Chemical analysis of jam includes water content, total sugar, acidity (pH), and antioxidant activity. The physical analysis of the jam includes the greasing power and color. Organoleptic properties were tested based on the level of preference. The data obtained were statistically analyzed with a 95% confidence level and continued with the Duncan Multiple Range Test (DMRT) if there was a significant difference.

The results of this study showed that the amount of dragon fruit flesh and sugar had a significant effect on the chemical, physical, and preference level of red dragon fruit jam. The preferred jam is the jam with 300 g of fruit flesh and 80 g of sugar with 23.14% wb water content, 42.40% db total sugar, 5.60 acidity (pH), 18.36%RSA antioxidant activity, 9.78 cm oil power, with the color brightness of 26.34, red 3.67 and yellow -0.41.

Keywords: Dragon fruit, jam, sugar, gel characteristic